

LIGHT-COLORED RESUPINATE POLYPORES—IV

WILLIAM A. MURRILL

The last article, devoted to red or reddish species, appeared in the March number of *Mycologia*. In the present article, I propose to discuss some of the resupinate forms in which yellow is the predominant color.

74. *Poria aurea* Peck, Ann. Rep. N. Y. State Mus. 43: 67. 1890

Described as follows from specimens collected by Peck at Sevey, New York, in July on decaying wood of sugar maple :

“Effused, forming patches several inches in extent, 2 to 3 lines thick, separable from the matrix, golden yellow; subiculum thin, sub-gelatinous, the young margin byssoid or fimbriate, greenish-yellow, soon disappearing; pores small, subrotund, elongated, the dissepiments thin, rather soft.”

This species, which seems to occur on both deciduous and coniferous wood, has been confused with *Poria subacida*, even by Peck himself. According to Overholts, the spores are oblong or short-cylindric, smooth, hyaline, $5.5-7.5 \times 2.5-3.5 \mu$; cystidia large, hyaline, abundant, projecting. I find the types to be near *P. subacida*, but a richer golden-yellow and apparently more fragile.

75. *Poria sulphurella* (Peck) Sacc. Syll. Fung. 9: 190. 1891

Polyporus sulphurellus Peck, Ann. Rep. N. Y. State Mus. 42: 123. 1889.

Described as follows from specimens collected by Peck in September on dead poplar bark in the Catskill Mountains :

“Resupinate, effused, very thin, following the inequalities of the matrix; subiculum and margin downy, white; pores very short, minute, rotund, very pale-yellow, often with a slight salmon tint, the dissepiments obtuse.”

The types are well preserved at Albany, and Overholts has found the spores to be cylindrical or allantoid, hyaline, $3-5 \times 1-2 \mu$; cystidia none.

76. *PORIA LEUCOLOMEA* (Lév.) Cooke, *Grevillea* 14: 112. 1886
Polyporus leucolomeus Lév. *Ann. Sci. Nat.* III. 5: 140. 1846.

Described as follows from specimens collected by Ménand at New York City, probably on red cedar:

“Pileo tenui resupinato undique adnato, margine albo tomentoso sterili, poris mediis superficialibus angulatis ore laceratodentatis ochraceo-fulvis.

“Chapeau large de 2 à 4 centimètres, membraneux, adhérent par tous ses points. Cette espèce se distinguera facilement à ses pores, qui sont d'un jaune fauve, ainsi que par sa marge blanche, tomenteuse et stérile.”

This species was not found at Kew, and my notes made at Paris contain no mention of it. The description is inadequate without a look at the type. Compare *Poria subincarnata*.

77. *PORIA VITELLINA* (Schw.) Cooke, *Grevillea* 14: 110. 1886
Boletus vitellinus Schw. *Schr. Nat. Ges. Leipzig* 1: 100. 1822.

Described as follows from specimens collected by Schweinitz on dead wood in North Carolina:

“Subexpansa molliuscula, margine byssino, poris magnis elevatis opacioribus.

“Rarus fungus in fissuris lignorum, maxime putridorum, nidulat. Color pulcherrime vitellinus, post exsiccationem remanet. Pori molles.”

Several different plants have been determined as this species by Morgan, Ellis, and others, but I have seen none so named that appear to match the very fragmentary types at Kew. If the species were white, I should place it near *Poria incerta*.

78. *PORIA AURANTIOPALLENS* (Berk. & Curt.) Cooke, *Grevillea* 14: 112. 1886

Polyporus aurantiopallens Berk. & Curt. *Grevillea* 1: 53. 1872.

Described as follows from specimens collected on pine in South Carolina:

"Suborbicularis, margine elevato obtuso cinctus; poris parvis.

"About an inch wide; margin obtuse raised; pores $\frac{1}{90}$ inch wide. Allied apparently to *P. bombycinus*."

The type at Kew is 1.2 cm. in diameter and 1-2 mm. thick; margin elevated, whitish-pubescent; tubes pale-orange-yellow; context firm.

79. *PORIA TEGILLARIS* Berk. Grevillea 15: 25. 1886

Described as follows from specimens in Berkeley's herbarium collected on dead wood in Carolina:

"Effusa, indeterminate, tenuissima, flavo-fuscescens, substrato obsoleto; poris aequalibus, rotundatis, minimis, dissepimentis tenuibus.

"Reduced to a mere porous stratum following the inequalities of the wood."

Little idea can be gained of this species by seeing the type, and it is a pity that Cooke published Berkeley's name.

80. *PORIA CHRYSOBAPHA* (Berk. & Curt.) Cooke, Grevillea

14: 113. 1886

Polyporus chrysobaphus Berk. & Curt. Grevillea 1: 53. 1872.

Described as follows from specimens collected by Peters in Alabama:

"Totus resupinatus, immarginatus, aureo-olivaceus; poris elongatis obliquis; sporis ferrugineis. No. 6342. Alabama. Peters.

"Entirely resupinate without any distinct margin; of a golden yellow, inclining to olive; pores elongated, oblique, $\frac{1}{36}$ inch wide; spores ferruginous."

The type at Kew is so very poor, being a mere fragment 2×1 cm., that it is difficult to get a true idea of the plant from it; but the olive-yellow tubes and ferruginous spores should be quite characteristic. Compare a specimen from Ohio so determined by Morgan.

81. *PORIA FLAVIPORA* Berk. & Curt. *Grevillea* 15: 25. 1886

Described as follows from specimens collected on dead wood in Venezuela by Fendler.

“Effusa, indeterminata, tenuis, alutaceo, v. ochraceo-favida, margine radiante, tenuiore, albido; poris inaequalibus, minimis, angulatis, confluentibusque, dissepimentis tenuibus, acutis.”

Types have been examined at Kew and also in the Garden herbarium.

82. *Poria ochracea* sp. nov.

Effused for many centimeters, continuous so far as the substratum will allow, inseparable, 1 mm. thick; margin wide and conspicuous in young stages, thin, appressed, membranous, tomentose, pallid, becoming much reduced in age; context pallid, not apparent in age; hymenium somewhat uneven, appearing in patches on the subiculum and becoming continuous, not glistening, ochraceous when fresh, isabelline in dried specimens; tubes large, firm, angular, very regular, thin-walled, entire, 1 mm. long, 2-3 to a mm.; spores smooth, pip-shaped, hyaline, $4.5 \times 2 \mu$; no cystidia observed.

Type collected on a decayed fallen oak limb in mixed woods at Crabbottom, Virginia, 3,000 ft. elevation, July 17-21, 1904, *W. A. Murrill* 183.

83. *Poria flavida* sp. nov.

Effused for several centimeters, continuous, inseparable, 1-3 mm. thick; margin conspicuous in young stages, very thin, appressed, membranous, yellow, more or less disappearing with age; context thin, pallid, soon inconspicuous; hymenium arising in patches, becoming almost continuous, rather uneven, not glistening, a fine yellow when fresh, discolored-isabelline in dried specimens; tubes very large, angular, irregular, about 1 to a mm., the edges very thin, entire to lacerate, soft, fragile, and collapsing; spores ellipsoid, smooth, hyaline, uniguttulate, copious, $5 \times 3.5 \mu$; cystidia not observed.

Type collected on decayed pieces of pine timber at Pointe à la Hache, Louisiana, in 1886, *A. B. Langlois* 54. Another packet collected by Langlois at the same place January 17, 1886, contains golden-yellow mycelium which grew in sawdust in pine

woods. This may belong to the same fungus, but one can not be certain of it.

84. *Poria Calkinsii* sp. nov.

Effused for a few or several centimeters, becoming continuous, 1-2 mm. thick; margin conspicuous, appressed, tomentose, isabelline in dried specimens; context a distinct isabelline membrane; hymenium first appearing at the center of circular patches of subiculum, becoming continuous, even, glistening, isabelline in dried specimens; tubes firm, angular, regular, 1-2 mm. long, 4 to a mm., edges at first rather thick and entire, becoming thin and lacerate; spores broadly ellipsoid, smooth, hyaline, rounded at the ends, uniguttulate, $4 \times 2.5 \mu$.

Type collected on fallen corticated hardwood branches in Florida, *W. W. Calkins 521*. What appears to be the same species was collected by Ellis on dead maple limbs at Newfield, New Jersey, in October, 1874.

85. *Poria Parksii* sp. nov.

Entire plant pale-yellow when fresh, becoming distinctly flavous on drying; effused for a few centimeters, continuous, separable, thin; margin conspicuous, tomentose, more or less membranous; context like the margin; hymenium becoming continuous, rather even, not glistening; tubes short, small, thin-walled, with entire to lacerate edges, the mouths circular at first, becoming angular and longer than broad; spores copious, smooth, hyaline, subglobose, uniguttulate, 4μ ; cystidia none.

The type of this unusually attractive, bright-yellow species was collected beneath leaves on roots of tan-bark oak in a dense oak forest at the Boys' Outing Farm, Saratoga, California, January 13, 1921, *Harold E. Parks 965*. Said by Mr. Parks to have been collected at the same place in February, 1919, and sent to the University of California. Growing in this way under a heavy deposit of leaves, the specimens I have seen may be abnormally developed.

86. *Poria subradiculosa* sp. nov.

Effused for several centimeters, becoming continuous, inseparable, 2-4 mm. thick; margin very broad and conspicuous in young stages, thin, appressed, membranous, white to orange-

yellow, often connected with long, branching, rhizomorphic strands; context membranous, white or yellowish, varying in thickness; hymenium appearing in patches, becoming continuous and somewhat abnormally vesiculose, uneven, not glistening, bright-orange-yellow when fresh; tubes large, irregular, angular, 1-3 mm. long, 1-2 to a mm., edges thin, collapsing and becoming lacerate with age; spores ellipsoid, smooth, hyaline, copious, about $5 \times 2.5 \mu$.

Type collected on decayed pine bark and leaves at Biloxi, Mississippi, September 6, 1904. *Mrs. F. S. Earle 40*.

What appears to be a form of the same thing was collected on the under side of pine chips at Auburn, Alabama, January, 1896, by L. M. Underwood. The mycelium was yellow when fresh, widely creeping, the smaller strands whitish; subiculum cottony-flocculent, yellowish, forming at first irregular, thin-walled tubes without the development of any further context; mature tubes irregularly labyrinthiform, deep-golden-yellow, 1-2 to a mm., edges entire, soft when fresh. The spores are ellipsoid, tapering obliquely at one end, smooth, hyaline, copious, $6-7 \times 3-4 \mu$; no cystidia seen. The mature tubes look quite different from those in Mrs. Earle's specimens, which latter are rather vesiculose and abnormal.

This species differs from *Poria subacida* in its bright-orange-yellow color, larger tubes, broad margin, and conspicuous rhizomorphic strands. One would naturally think of *Poria xantha* Pers. in this connection; but South Carolina specimens so named sent to Upsala by Berkeley are only the yellow form of *Poria medullapanis*. The description of *Poria vitellina* seems to fit the plant fairly well, but Schweinitz' types are very distinct. Underwood determined his specimens as *Poria chrysoloma* Fries, a species confined to Europe so far as I know.

87. *Poria flavilutea* sp. nov.

Effused for several centimeters, continuous, inseparable, about 1 mm. thick; margin at first conspicuous, byssoid, thin, appressed, white, becoming inconspicuous with age; context white, scarcely apparent in age; hymenium even, regular, scarcely glistening, flavo-luteous in dried specimens; tubes angular, quite regular ex-

cept when varied by obliquity, thin-walled, entire, 1 mm. long, 4 to a mm.; spores ellipsoid, smooth, hyaline, $5 \times 3.5 \mu$; no cystidia observed.

Type collected on much-decayed fallen branches and moss-covered roots at Rio Piedras, Porto Rico, November 19, 1911, *J. R. Johnston 97*.

88. *Poria jalapensis* sp. nov.

Effused for many centimeters, continuous, inseparable, 1–2 mm. thick; margin slight, tomentose, white, inconspicuous in age; context white, conspicuous and punky in places; hymenium mostly uneven, nodulose or following the inequalities of the substratum, not glistening, distinctly ochraceous in dried specimens; tubes angular, very regular, firm, rather thin-walled, 1 mm. long, 4 to a mm., the edges produced into short, sharp teeth; spores ellipsoid, smooth, hyaline, $5 \times 3 \mu$; no cystidia observed.

Type collected on a decayed hardwood trunk in a moist virgin forest at Jalapa, Mexico, December 12–20, 1909, *W. A. & Edna L. Murrill 252*.

89. DAEDALEA SULPHURELLA Peck, Ann. Rep. N. Y. State Mus.
44: 133. 1891

Described as follows from specimens collected by Peck on much-decayed wood at Salamanca, New York, in September:

“Resupinate, effused or nodulose, pale sulphur yellow; pores short, labyrinthiform, the dissepiments often lacerated and irpici-form in the dry plant; spores subglobose or broadly elliptical, .0002 in. long.

“Mostly very irregular or nodulose, following the irregularities of the wood and encrusting mosses. It is of a beautiful pale yellow color when fresh, but it changes to a dull pallid hue when dry.”

The type at Albany is very poor, consisting mainly of a few coarse teeth that suggest little. Overholts finds the spores to be ellipsoid or globose, hyaline, $5-6 \times 4-5 \mu$, and says that the mature fragments seem more like an *Irpex* than a *Daedalea*. Fresh specimens would be highly desirable.

OTHER YELLOW SPECIES

Poria calcea Fries, var. *sulphurea*. Romell so determined specimens collected by me on a white pine log in Maine, August 28, 1905, which were distinctly lemon-yellow when fresh. I have not studied this species very carefully, as the specimens are apt to be sterile.

Poria cremeicolor Murrill. Very pale yellow. See *Mycologia* 12: 85. 1920.

Poria fatiscens (Berk. & Rav.) Cooke. Sulphur-yellow to chrome-yellow, at least in herbarium specimens. See *Mycologia* 11: 238. 1919.

Poria heteromorpha Murrill. Distinctly ochraceous, becoming fulvous with age. See *Mycologia* 12: 92. 1920.

Poria incerta (Pers.) Murrill. The herbarium specimens of this common, variable species are often pale-yellowish. See *Mycologia* 12: 78. 1920.

Poria medullapanis (Jacq.) Pers. Often a beautiful egg-yellow or chrome-yellow, especially on the margin of young plants; hence the names *P. pulchellus* and *P. holoxantha* assigned to American material. See *Mycologia* 12: 48. 1920.

Poria myceliosa Peck. Tubes pale-yellow. See *Mycologia* 12: 301. 1920.

Poria radiculosa (Peck) Sacc. Orange-yellow. See *Mycologia* 12: 301. 1920.

Poria semitincta (Peck) Cooke. Tubes usually pale-yellow. See *Mycologia* 12: 300. 1920.

Poria subacida (Peck) Sacc. Usually pale-yellow when fresh, becoming much deeper yellow in the dried condition. Orange tints are sometimes present. See *Mycologia* 12: 79. 1920.

Poria subsulphurea (Ellis & Ev.) Murrill. Pale-yellow. See *Mycologia* 11: 242. 1919.

Poria xantholoma (Schw.) Cooke. Margin described as elegantly luteous, tubes pallid. See *Mycologia* 11: 234. 1919.

Xanthoporia Andersoni (Ellis & Ev.) Murrill. Tubes at first whitish, soon colored yellow by the abundant spores.